IN

09/762249 JC05 Rev d PCT/PTO 0.5 FEB 2001

## WO 00/08147

PCT/FR99/01479

1

## SEQUENCE LISTING

```
<110> [JEAN DAUSSET FOUNDATION] (CEPH)
<120> SEQUENCES ASSOCIATED WITH CANCER SUPPRESSION AND WITH
      RESISTANCE TO THE H-1 PARVOVIRUS
<130> D16333
<160> 15
<170> PatentIn Vers. 2.0
<210> 1
<211> 303
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP9
<400> 1
teggteatag tetggatggg atteatgata tgaageaaca geatgteata gaaacettga 60
ttggcaaaaa gcaacagata tctcttgcaa cacaaatggt tagaatgatt ttgaagattg 120
atgacattcg taagcctgga gaatctgaag aatgaagaca ttgagaaaac tatgtagtaa 180
gatecaette tgtgattaag taaatggatg tetegtgatg egtetacagt tatttattgt 240
tacateettt teeagaeact gtagatgeta taataaaaat agetgtttgg ttaaaaaaaa 300
                                                                   303
aaa
<210> 2
<211> 1356
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP10
<400> 2
tgagcagggc gacggcggcg gtggaacctg cggggctggg gcgccgccat gggcgcctgc 60
actgcactga ggacccggtg ccggaccggt gggcggcgac atgcagcagc tgaaccagct 1.20\,
gggcgcgcac gagttctcag ccctgacaga ggtgcttttc cacttcctaa ctgagccaaa 180
agaggtggaa agatttctgg ctcagctctc tgaatttgcc accaccaatc agatcagtct 240
tggctccctc agaagcatcg tgaaaagcct ccttctggtt ccaaatggtg ctttgaagaa 300
gagteteaca gecaageagg tecaggegga ttteataact etgggtetta gtgaggagaa 360
agccacttac ttttctgaaa agtggaagca gaatgctccc acccttgctc gatgggccat 420
aggtcagact ctgatgatta accageteat agatatggag tggaaatttg gagtgacate 480
tgggagcagc gaattggaga aagtgggaag tatattttta caactaaagt tggtggttaa 540
gaaaggaaat caaaccgaaa atgtgtatat agaattaacc ttgcctcagt tctacagctt 600
cctgcacgag atggagcgag tcagaaccag catggagtgt ttctgctgat ttctgtccct 660
geateteece tggeceegtt cectgeecte etecetteee tgggtgaetg etetgagagg 720
cacttcactc acaggectgt gggatgetec atggggeeet getggeteca tggggeeeag 780
gtgcaaaggg tttctgaaaa acagcaggat taagtactga aagagcccaa cacaattacc 840
ctgtaaactc tctgttaggg caaccaccac cacctgtctt ccaggacaca tttttagata 900
ctctgacagg ccactgcatc tcagattcag gggagaaaat aagttgtcac ctccccttca 960
aagttccaga gtaaacaaat ggtgccatca ttcaagataa catgctgatc accetectec 1020
caaaaagcaa gagcttgttt atggctgagg aatcggcgga ttgtctgaat gacacatata 1080
cagageeece aeggatttet geacactetg ggtetgtget ggtggaacat tgecaateag 1140
```

WO 00/08147 PCT/FR99/01479

```
ttottaatga ggcacctgtg tgtaaataca tgottggtot tototgcaga gaactgaggo 1200
taaactotgt coctacttot ggttttgood tgtoatgtog taacgaggtg ggcottttga 1260
ggccatttta gtttgagttc gaaccaacca cctctgttgg ttagatgatg aataaaaagg 1320
ttctgaagaa aaaaaaaaa aaaaaaaa aaaaaa
                                                                   1356
<210> 3
<211> 100
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP11
<400> 3
teggteatag eggtteeaag attagettet aetgetteet gtagettgge taatataete 60
tgctttacag ctgatgatat ggtgttgtta aaaaaaaaa
                                                                   100
<210> 4
<211> 467
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP12
<400> 4
tcggtcatag taaattcagc atgaaagaga atattacaga aaagacagca gcagaagcat 60
tagcattate taatatttat atatgttate aacataacae agcagtaaaa ggtttaaatg 120
catatcaatg ggtaccatgt ctaaaaatta ctatagtacc tatttagtgt attggatatt 180
tttcttaaag agtgtttgct gtaactagaa cagcataata catgatttag tacagttaat 240
tottattgat taaataatgt atttatgtac tgaagaaagt gaaaaggaga cagatatttt 300
ttgcttcatt ttgattccag atttaacatt taaatgaaga ttccaaagga ccatgacatg 360
tcattattta actgaaatgg gcttcaaaat atttaaaaga cggtatgatt tgtatctaaa 420
cagcaaggtg gcaccagata cacqtaatgc tactggccta tgaccqa
<210> 5
<211> 1547
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP13 PROTEASOME HOMOLOGUE
<400> 5
tttttttttt tttttttt ttttttaaca aagcagaggg gtttattata ggaacattct 60
caaactgcaa cggaaaagat gtccgtacag gtggatgggg atggagatcc acctcggagt 120
acacagactt cagggggcct cctgcctggc acgttctttc tctcccgtat cacctaagac 180
cctgagacct ccaccctctg caggagagac ccacaaagaa gcctcctccc tgtggcctgg 240
ctcccatcag ggacagtcct gtttttagag caagaacagt ctgtacttca gacaggatcc 300
caacccccac ccaaattcaa tgtcgaccgt ctgagcagcc agcttcattg gctgcaaacg 360
cctctctcag gtgagtcaaa ggagacacga cggggaacca gggggcccta ggtgaggatg 420
tcatgggcct ggtgctccac cagcatetec atgetettea cateegtgca ecagaactee 480
aggoggteet teatteeett gatetgttge aaateeaaca eteggggetg caeceaggte 540
atgtggactc gtttgtccac ctcgtctata ctgcctttca ccagccccac cgaaagggcc 600
ttcatcacca gaagetecae etcatteaet gtgattttag eaettttgge aatttettea 660
aaagtgagtt gtctgtgatt ggcaggtcgt gtgaaagtca tctccatgag gcacaacaac 720
tgaattttcc tcagaagctg ggcttcatta gctgctaaat caggctgctg gccccaggca 780
gtottoagag totggaacog ototaogttg coactgttga aggoatagag ggtgtoaato 840
```

, i to , i ii

```
agccactgcc ggtcagtatt cctcagggac tccagcacag ggtgcatgag gagttctcca 900
aagttaaaaa eteectegee gagaagteet getageeeca gegtgaagge teteteetge 960
tgctcagaca ctggtagatc cttgatgtca acacagccca aaaaccgcag agcatctttg 1020
taqtaqqacq cqtqqtttcc qattqtttqa taqtatttac tqqaqaqatc ataqaaacqa 1080
ctgtgaaccg atgtcacacc aggaaggttg ttgagcattt cttcaacatc ttcaattgtt 1140
tcctttgtaa cctgtaggtc cccgatgttt aattttagag ctccaattgc tgttttacac 1200
aggateactg ecteateact actttteace tteteacqag tetttteeag aaaagtaaga 1260
gccacattag gatcagtcat ctgtctaact acgtgaagaa tgatttccac gagggacaga 1320
ggattcaccc tgtgttcaaa ttcactgata aagttttcat aaagcttaat gagaccatct 1380
ccttgggcaa agcacggatc ctgcacaaaa tcaagcacct gaagtgtcag ctgatgccac 1440
aacttetteq tqtaqaqete etecaqaeqq tqceacaeaq eggqetqeee ggqeeeqgag 1500
ctctggctct gctgtaggaa gcccggtacg tccttcatga cagcagg
<210> 6
<211> 102
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP14
<400> 6
ggaaccaatc ctaaagaata ttottacata taataaagaa ttoccatttg atgttcagco 60
                                                                    102
tqtcccatta agaaqaattt tqqcacctqq taaaaaaaaa aa
<210> 7
<211> 1825
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP15
<400> 7
teggeettte acetetteae ttateettag teecagtage eaggataeet gatggeeaeg 60
cactetecea cagagetgga aatggggggt gggggacaga ttettaegga aatttttta 1.80\,
cctgacttgc tatgaaaaaa ctcatcacac aagaagagaa acagtaacct cactttgaaa 240
attageteca etcaagacta gtecaegaac gagaceegee ttttetacae aggatecaag 300
ctcacgagaa gcagccagag tgccccgcct ccgccggctc tggtctgcca ttcgccagtg 360
cagggatetg geatggacea gatgtggega atggeageae agegeggtgg etgggtetge 420
acactggcct ctgcagccag atttctatat tgggagtttt ttaaaaagac atttcatagc 480
{\tt caacaagaat\ cagtagaagt\ gctgggagca\ gcagctgggg\ aagctgccgc\ ccacgggctc\ 540}
{\tt tgccccttcc} \ \ {\tt agctggagcc} \ \ {\tt gcccgtgcct} \ \ {\tt ccaggggcca} \ \ {\tt agaggatgat} \ \ {\tt gtcgtggcct} \ \ {\tt 600}
ccattetegt ttetatgeag ecceatagte caaggacace cagteeacat etaceatata 660
gcaagtttag taagggaagg cagcatacgt cccagggaca gtgggtttgg atctgtctag 720
aacagcggtt tgtggctgtg gcccagctcc gagagtgata tttgctctgg taggtgaggg 780
cctgagggta cattteteca cctgtgeece etcatgttea cagaggattt cageagetge 840
\verb|aactgcgcac|| \verb|gccaggtggg|| \verb|gaagggtggg|| \verb|ggtgggcctg|| \verb|gttgccccat|| \verb|gttaggaaat|| 900
cactaccagt caggtggggc tggggctggg tggacaggat caggattccc ttgaaagccc 960
aggcagggtg agcagtccca gtggtcctag tgccgcatca gatccaggtg ggtgagggca 1020\,
ggaggccatg cggaggagcc gtggatctgc ccacacatag gctactggaa tagtttaacc 1080\,
cagcaacttt cetttttata aaacaacaaa teggtteaac tetgtetgea aattaacage 1140
tgaacacetg caactgaaat gttttttgat eegacgtaet gaaataegga agteatgete 1200
ttcccaccet ccacccacca gagtggaace cgctgcaaaa tccccagcet taattettge 1260
ttcaggaccc agaccggtgt cttgctctag ggcaacccag ggcagagggg ccaggtctgc 1320
ccagcgttta ccactgctgt caagcacage cettggcace atacgggeca teetcagtga 1380
ggcagecece cataggette egeaagetet ggteeegaag aggetgtgeg agecetteee 1440
```

WO 00/08147 PCT/FR99/01479

ggccctcccc aggccccccg cccctcctc tgcctgctgc gtggaggcag ccatgggaag 1500 gageceaggg gagetggeet gggggagega ageceatgtt egetteetga ettagagetg 15.60 gggggggtgg ggggtggggc ttgttcccct gcagtatctg ttctgtgaag tttgttaaat 1620 gtaaggaaag ottaaattot tgtatottta aaagagaaaa tottatttaa coottitigtg 1680 ttctagattt acttacacac atagcctaga gctcagtttt agttttaaca ttgtgaaaat 1740 attaaaagaa tottgtaact ttattotttt ttotootgot gaaaaaaaaa attaaaccaa 1800 tcqtatqaaa aaaaaaaaaa aaaaa 1.825 <210> 8 <211> 90 <212> DNA <213> Homo sapiens <220> <223> TSAP16 <400> 8 tggattggtc caggattggg gttttgctag tccatagcaa ttcgaagggc agtgggctag 60 tgttatgaga atattggcaa aaaaaaaaa 90 <210> 9 <211> 131 <212> DNA <213> Homo sapiens <220> <223> TSAP17 <400> 9 ctgcttgatg taggagggat taagttagta tttcccgtat cgaccaagac aaaattacaa 60 tatacgcata acaaagacaa acaccagtta ettggeteaa tatecaagtt ttaacetage 120 131 aaaaaaaaa a <210> 10 <211> 121 <212> DNA <213> Homo sapiens <220> <223> TSAP18 <400> 10 ggaaccaatc ccaacacaac tggattctac tgaaattacc acatatttga ggtccacaag 60 121 <210> 11 <211> 893 <212> DNA <213> Homo sapiens <220> <223> TSAP19 <400> 11 atggagggcc acatetgcca gagcetggag tetgegaagg eegggaeeeg gtteeeegge 60 ccacagtggg ggtgtgcaaa cccgagagaa ctgggttgca aattcgtgaa gaatcagcat 120 catgtttggc agctgagtat tggagccagg agcctgccat gaggttttga gaacagagtg 180

WO 00/08147 PCT/FR99/01479 5

```
ctgttttaga gctggcagca gcatctcagc ccaagagaag gttatattcc cagaggatgt 240
cagtoccaag gaccagtago tgccatcagt ttggattotg aaaactaact ggcatcaaca 300
ctgggtgtag aaacatgctt gccttatgta tcagaggaca tgctcagcag atccaagaga 360
tatatttggc aactttttct agaaaaggca cattgggtat cattcattac attcttgagt 420
ttttttgggt ttttttttt ttttttgaga cagtcttgct gtattgccca ggctggagtg 480
tggtggcaca atcacagete attgcateet caateaceca ggeetaagea atecteecac 540
cttgtagctg ggactacagc tcacagcaca cctggctaaa atttttttt tgttgagacg 600
gattetetat gttgeecagg etggteteag geteetggge teagatggte eteetgeete 660
agettecaaa ggeacaggee aagttgtage tttgteeett geeateatge ecaacaagag 720
gttctatacc ttttaatgaa ttgactttca taaattggtt atgttggtgg gcaagttctt 780
taagetggaa attgtaaatt eeteetgaaa tgttttttea tgeagttaee atgaactaat 840
893
<210> 12
<211> 151
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP20
<400> 12
gatetgactg tagggactat atteattact getggactat getgetttee ceaacecet 60
aggattttaa aaatagcacg ctgcacttga aacaggggaa gacactgtat aacatccaaa 120
tgttcttctt ccctagaggc caaaaaaaaa a
                                                                 151
<210> 13
<211> 1295
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP21 SNARE HOMOLOGUE
<400> 13
atccagcgcc agctggagat catgggcaag gaagtctcgg gcgaccagat cgaggacatg 60
ttcgagcagg gtaagtggga cgtgttttcc gagaacttgc tggccqacgt gaaqqqcqcq 120
egggeegeee teaacgagat egagageege cacegegaac tgetgegeet ggagageege 180
atccgcgacg tacacgagct cttcttgcag atggcggtgc tggtggagaa qcaqqccqac 240
accetgaacg teategaget caacgtacaa aagaeggteg actacacegg ceaggecaag 300
gcgcaggtgc ggaaggccqt qcaqtacqaq qaqaaqaacc cctqccqqac cctctqctqc 360
ttotgotgto cotgoticaa qtaqoaqqoo qqooqqqoo qooaccqooc atoccaqaco 420
atggagegeg etgggaagga egteaceaaa geegggaget etgeeetgea gggagttgee 480
ccaaccettt ceggaactea gtetttagaa aagaaacgee aggtteaaga attgeaaace 540
agoctgtgct tggaaagatg gttagttgat accgtccgat gattcttcag taaagataga 600
ttcccacaaa gttgtgcaat gtcattatat gacacettgc actettaccg tettgacaga 660
agccaagtaa ggaactgaag ttgtatctga ctgtagggtg aatgtctgag gcctgcctcc 720
taataaagac tcaaggagga agtcaattgg gcatctgcta atagaatgaa ctcatgatqq 780
aaacttcagt tcatttactt tgtccctgaa aattccctgg ttctgttcca ttttgagcga 840
aattggcctt gggaaaaacc acqttcttcc tttccgattc ttcatccggt ctacggctat 900
gcaattcctc cccaaatata gatcttattt ctgctcattt cccctactta ttaaaatcac 960
accaaacact tactattttc ttatctcttt cactttttaa atatctttca ccaggttata 1020
ttttggtatt atttttccaa acatttttaa gcactgaata tcgaacaagc actcaaattg 1080
aagtatcagt catgttttgt gtatttttcg ctgataaaaa ttatttaaca tttatatttt 1140
tacttgatta catatgcaca tgtatgtaaa tgtaaaatac taatattcac taatatatgt 1200
acataatgat caattggttt aacttctttt atgtaagtat ggtatataaa tttcaagacg 1260
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa aaaaa
                                                                 1295
```

WO 00/08147 PCT/FR99/01479

6

```
<210> 14
<211> 2242
<212> DNA
<213> Homo sapiens
<220>
<223> TSAP22
<400> 14
agggetegag eggeegeeeg ggeaggttgt gttettaatt tgetttteee ttgtgagtee 60
tgcatcattt gaaaatgtcc atgcaaagtg gtatcctgag gtgcggcacc actgtcccaa 120
cactcccatc atcctagtgg gaactaaact tgatcttagg gatgataaaag acacgatcga 180
gaaactgaag gagaagaagc tgactcccat cacctatccg cagggtctag ccatggctaa 240
ggagattggt atggaateet gtgtttttee teeteettgt acetetttta ttgtagtgae 300
agactggagt ccagtctggg aaaggagggt gtgtgtctcc cactcagggc ctggtgtact 360
cttggggaac cagctggcaa ggccctctgg gtcttaacgt cagcgttgga aggtggaagc 420
agggetggga geeggeagaa ggegeeeggg eeceaggage egeeteeege tggtggtgtg 480
atcagaagag agtggggtcg agtgtacatt gccgtgtggt cgtgtttcct gtaggtgctg 540
taaaatacct ggagtgctcg gcgctcacac agcgaggcct caagacagtg tttgacgaag 600
cgatccgagc agtcctctgc ccgcctcccg tgaagaagag gaagagaaaa tgcctgctgt 660
tgtaaatgtc tcagcccctc gttcttggtc ctgtcccttg gaacctttgt acgctttgct 720
caaaaaaaaa caaaaaaaaq aaaaaaqtcq caaaaaaaaa aaacaacqqt qqaqccttcq 780
cactcaatqc caactttttq ttacaqatta atttttccat aaaaccattt tttqaaccaa 840
tcagtaattt taaggttttg tttgttctaa atgtaagagt tcagactcac attctattaa 900
aatttagccc taaaatgaca agccttctta aagccttatt tttcaaaagc gccccccca 960
ttottgttca gattaagagt tgccaaaata cottotgaac tacactgcat tgttgtgccg 1020
agaacaccga gcactgaact ttgcaaagac cttcgtcttt gagaagacgg tagcttctgc 1080
agttaggagg tgcagacact tgctctccta tgtagttctc agatgcgtaa agcagaacag 1140
cctcccgaat gaagcgttgc cattgaactc accagtgagt tagcagcacg tgttcccgac 1200
ataacattgt actgtaatgg agtgagcgta gcagctcagc tctttggatc agtctttgtg 1260
atttcatage gagttttetg accagetttt geggagattt tgaacagaac tgetatttee 1320
tctaatgaag aattctgttt agctgtgggt gtgccgggtg gggtgtgtgt gatcaaagga 1380
caaagacagt attttgacaa aatacgaagt ggagatttac actacattgt acaaggaatg 1440\,
aaagtgtcac gggtaaaaac tctaaaaggt taatttctgt caaatgcagt agatgatgaa 1500
agaaaggttg gtattatcag gaaatgtttt cttaagcttt tcctttctct tacacctgcc 1560
atgcctcccc aaattgggca tttaattcat ctttaaactg gttgttctgt tagtcgctaa 1620
cttagtaagt gcttttctta tagaacccct tctgactgag caatatgcct ccttgtatta 1680
taaaatottt otgataatgo attagaaggt ttttttgtog attagtaaaa gtgotttooa 1740
tgttacttta ttcagagcta ataagtgctt tccttagttt tctagtaact aggtgtaaaa 1800
atcatgtgtt gcagctttat agtttttaaa atattttaga taattcttaa actatgaacc 1860
ttottaacat cactgtottg coagattaco gacactgtoa ottgaccaat actgaccoto 1920
tttacctcgc ccacgeggac acacgeetee tggtagtege tttgeetatt gatggtteet 1980
ttgggtctgt gaggttctgt aaactggtgc tagtgctgac gatgttctgt acaacttaac 2040
tcactggcga gaatacaggg tgggaccett cagecactae aacagaattt tttaaattge 2100
cagttgcaaa attgtggagt gtttttacat tgatcttttg ctaatgcaat tagcattatg 2160
2242
aaaaaaagcg gccgctgaaa cc
<210> 15
<211> 144
<212> DNA
<213> Homo sapiens
<220>
<223> TSIP3
<400> 15
ggaaccaatc caaatgccca tcaatgatag actagataaa gaaaatatag tacatatgca 60
```

WO 00/08147 PCT/FR99/01479